



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/647,546	11/29/2000	Bernard Feurer	BIF103839	8013

466 7590 12/03/2001

YOUNG & THOMPSON
745 SOUTH 23RD STREET 2ND FLOOR
ARLINGTON, VA 22202

EXAMINER

SCHWARTZ, JORDAN MARC

ART UNIT	PAPER NUMBER
----------	--------------

2873

DATE MAILED: 12/03/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/647,546

Applicant(s)

FEURER ET AL.

Examiner

Jordan M. Schwartz

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. PCT/FR99/00764, filed on April 1, 1999.

Specification

The specification is objected to for the following reason: page 3, line 6 states "Figures 1 and 2 represent..." however, no figures have been provided with the application.

Furthermore, this application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Furthermore, the following guidelines illustrate the preferred layout and content for patent applications. These guidelines are suggested for the applicant's use. The following section headings are preferably used within the specification where appropriate and each of the numbered items should appear in upper case, without underlining or bold type, as section headings.

1. Background of the Invention.
2. Summary of the Invention.
3. Brief Description of the Drawings.
4. Detailed Description of the Preferred Embodiments. ***Claim Rejections - 35***

USC § 112

Claim 1 (and dependent claim 2) is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 2873

With respect to claim 1, that part of the claim stating "such as an intraocular lens" renders the claim vague and indefinite. If intraocular lens is intended as a limitation then it needs to be more positively and distinctly recited as such. Since the limitation was "such as", for purposes of art rejections below, the optical system need not be an intraocular lens and therefore the limitation of "such as an intraocular lens" was not given patentable weight.

In further reference to claim 1 the limitation "made of a homogeneous material" further rendered the claim vague and indefinite. It is not clear if "made of" is intended to mean "consisting of", "comprising" or if some other meaning is intended and the lack of clarity renders the claim vague and indefinite. For purposes of examination it was assumed to mean "comprising" and further clarity is required.

In further reference to claim 1, that part of the claim stating "the said index is high" further renders the claim vague and indefinite. It is not clear as to what index would be required in order to be considered "high" and the lack of clarity renders the claim vague and indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Smith.

Smith reads on this claim by disclosing the limitations therein including the following: an optical system (abstract, re intraocular lens); made of a homogeneous material (column 5, line 24 and column 7, line 15); and the index of refraction variable under the action of mechanical effects (column 1, lines 55-68, column 3, lines 7-25, column 4, line 64 to column 5, line 9). Since the index of refraction varies under the action of mechanical effects, it will inherently show variations in at least one given direction. Furthermore, it is believed that the index will inherently be high under the action of the mechanical effects this being reasonably based upon what is disclosed in Smith as well as upon the similarity in structure between Smith and that of the claimed invention.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Hutchings et al.

Hutchings et al reads on this claim by disclosing the limitations therein including the following: an optical system (abstract, re the "birefringent sensor that polarizes a laser beam" as the "optical system"). Although the term "made of" is assumed herein to mean "comprising" (as stated in the 112 rejection above), Hutchings discloses the sensor consisting of a homogeneous material (column 5, line 33). Hutchings et al further discloses the index of refraction variable under the action of mechanical effects (abstract, column 5, line 36). Since the limitation is "such as an intraocular lens", it need not be an intraocular lens and therefore this limitation has not been given patentable weight. Since the index of refraction varies under the action of mechanical effects, it will inherently show variations in at least one given direction. Furthermore, it is believed that

Art Unit: 2873

the index will inherently be high under the action of the mechanical effects this being reasonably based upon what is disclosed in Hutchings including the types of materials that can be used.

Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Schachar patent no. 4,373,218 (hereinafter referred to as "Schachar'218).

Schachar'218 reads on this claim by disclosing the limitations therein including the following: an optical system (abstract, re intraocular lens); made of a homogeneous material (column 3, line 38 re "oil" and column 5, line 3 re "liquid crystal material"); and the index of refraction variable under the action of mechanical effects (column 4, line 65 i.e. the adding or withdrawing of fluid would be a "mechanical effect" and column 5, line 67 to column 6, line 4 i.e. the movement of the ciliary muscle being a "mechanical effect" that leads to the changing index of refraction). Since the index of refraction varies under the action of mechanical effects, it will inherently show variations in at least one given direction. Furthermore, it is believed that the index will inherently be high under the action of the mechanical effects this being reasonably based upon what is disclosed in Schachar'218 as well as upon the similarity in structure between Schachar'218 and that of the claimed invention (such as the material being liquid crystal). It is believed that the liquid crystal material of Schachar is inherently a three dimensional polymer, this being reasonably based upon the similarity in structure between Schachar and that of the claimed invention as well as upon Schachar using the liquid crystal material to have a varying index of refraction similar to that of the claimed invention.

Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Gerdt.

Gerdt reads on this claim by disclosing the limitations therein including the following: an optical system (abstract, re "coupler"); made of (as this term is understood) a homogeneous material such as a liquid crystal material (column 4, line 47); and the index of refraction variable under the action of mechanical effects (column 10, line 50, claim 9). Since the limitation is "such as an intraocular lens", it need not be an intraocular lens and therefore this limitation has not been given patentable weight. Since the index of refraction varies under the action of mechanical effects, it will inherently show variations in at least one given direction. Furthermore, it is believed that the index will inherently be high under the action of the mechanical effects this being reasonably based upon what is disclosed in Gerdt, including that the material can be liquid crystal, similar to that of the claimed invention. It is believed that the liquid crystal material of Gerdt is inherently a three dimensional polymer, this being reasonably based upon the similarity in structure between Gerdt and that of the claimed invention as well as upon Gerdt using the liquid crystal material to have a varying index of refraction similar to that of the claimed invention.

Prior Art Citations

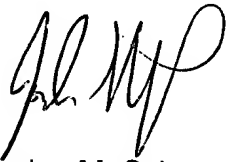
Schachar patent no. 5,731,909 is being cited herein to show an optical lens that would make obvious at least claim 1 (see column 2, lines 18-25).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jordan M. Schwartz whose telephone number is (703) 308-1286. The examiner can normally be reached on Monday to Friday (8:00-5:30), alternate Fridays off.

Art Unit: 2873

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached at (703) 308-4883. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

A handwritten signature in black ink, appearing to read 'Jordan M. Schwartz', is positioned above the printed name.

Jordan M. Schwartz
Primary Examiner
Art Unit 2873
November 15, 2001